

LOCATION-BASED SERVICE PLATFORM FOR SKILLED SERVICE PROVIDERS

An Undergraduate Capstone Project

Presented to the Faculty of the
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BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

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Dedication

This research paper is sincerely dedicated to our beloved families, who encourage me in conducting this study. They have never left our side throughout the process and gave us strength and hope. They gave us great sense of enthusiasm and perseverance in continuing this research.

We dedicate this work to the future researchers who seek to explore and innovate. May this study serve as a valuable reference and inspiration in the pursuit of knowledge and meaningful contributions to society.

And lastly, we dedicated this research paper to the almighty God who gave us strength, wisdom, guidance, power of thinking, and for giving us good health while doing this. All of these I offer to you.

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ABSTRACT

Title : LOCATION-BASED SERVICE PLATFORM FOR CONNECTING CLIENTS WITH SKILLED WORKERS

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In today's digital landscape, connecting individuals with local services requires innovative solutions that integrate real-time communication and location-based discovery. This research presents the development of a next-generation platform that seamlessly combines instant messaging with intelligent location-based service discovery. The platform addresses the growing need for integrated digital solutions that enhance user engagement and accessibility to local businesses and services.

The platform features a real-time chat system built on modern web technologies enabling instant communication between users and service providers. Beyond basic messaging functionalities, the system incorporates location-awareness, allowing users to discover and connect with nearby services effortlessly. The platform's architecture is designed around three fundamental components - a user-friendly interface for intuitive navigation, a robust backend system to ensure reliable operation, and a secure database to protect user data and privacy.

The system will include WebSocket for real-time communication, advanced geolocation services for accurate service discovery, and industry-standard security protocols to safeguard user information.

This research underscores the practical benefits of integrating communication tools with location-based services, bridging the gap between users and local service providers. The proposed platform not only improves user experience but also fosters stronger community connections, offering a blueprint for future innovations in location-aware communication systems.

Chapter I

INTRODUCTION

The widespread use of digital technologies and mobile devices has transformed various industries, leading to the growth of on-demand service platforms. These platforms rely on location-based services (LBS) to connect users with service providers in real time, meeting the increasing demand for fast and convenient access to different services (De Stefano & Leonardi, 2021). In the past, finding a trustworthy local service provider often required word-of-mouth recommendations, printed directories, or scattered online searches. This traditional approach was inefficient, lacked transparency, and made it difficult to verify provider availability and qualifications.

Location-based service platforms offer a more structured and efficient alternative. By utilizing geolocation features and advanced matching algorithms, these platforms simplify the process of discovering and hiring local professionals (Hossain & Kaur, 2023). Consumers today expect immediate access to services tailored to their needs, and these platforms directly address that demand. Additionally, they benefit service providers by expanding their reach, improving client management, and increasing visibility in an increasingly digital marketplace.

The impact of LBS platforms extends across multiple sectors, including home maintenance, personal care, and professional services. However, ensuring their effectiveness requires careful planning, particularly in areas such as user experience, security, and algorithm accuracy. Features must be designed to enhance connectivity while maintaining a seamless service experience. This capstone project focuses on the design and creation of a location-based service platform, aiming to contribute to the evolution of digital service systems and improve local service accessibility in today's technology-driven world.

Objectives of the Study

This study sought to develop a location-based platform that connect clients to skilled service providers, this study determined the effectiveness of the web application.

1. design and develop a location-based platform form connecting client to skilled service providers; and
2. evaluate effectiveness of the system through benchmark, pilot and final testing in terms of:
 - a. Functionality
 - b. User Experience
 - c. Security
 - d. Scalability

Significance of the Study

The study's outcomes will have a profound impact on various stakeholders, including:

To the Service Providers - By participating in the platform, service providers will be able to establish a stronger online presence, manage their services more efficiently, and access a broader client base. The platform will also enable them to build credibility, streamline their operations, and improve their overall competitiveness.

To the Clients - The platform will provide clients with easier access to verified local service providers, reducing the time and effort required to find suitable services. Clients will also be able to make informed decisions, communicate securely with service providers, and engage with them transparently.

To the Proponents - This study will provide the proponents with practical validation of their platform concept and its potential impact in the location-based service domain. Successful implementation and user engagement will furnish valuable data and insights for refining the platform and demonstrating the effectiveness of a location-based approach to service marketplaces. Furthermore, it will contribute to their expertise and recognition in the field of digital platform development and location-based service innovation.

Future Researchers - This study will provide a framework for developing location-based service platforms, contribute to the understanding of digital marketplace dynamics, and offer insights into user behavior in location-based services. The research will also establish methodologies for similar platform developments and identify areas for further research and development.

Scope and Delimitations

The Location-Based Service Platform project aims to develop a full-stack web application that connects clients with service providers based on location and service type. The scope includes user management, service provider management, service discovery, matching algorithm, in-app communication, backend API, and database design. The project will utilize a technology stack comprising React, Tailwind CSS, Node.js, Express.js, MySQL, Prisma, Jest, Google Maps API, and Socket.IO. The project is considered successful if it meets the criteria of implementing all in-scope features, being responsive and accessible, having a well-documented backend API, a properly designed database schema, and being deployable to chosen hosting platforms. The following features are out of scope: payment integration, real-time location tracking, admin dashboard, mobile applications, email/SMS notifications, video/audio calls, booking/appointment system, user verification with email, and user analytics.

Definition of Terms

LBS – Location-Based Services (LBS) are a type of service that utilizes geographic information to provide relevant data, services, or content to users based on their current physical location. These services leverage technologies such as GPS, Wi-Fi, and cellular data to determine a user's location and deliver location-specific information.

Prisma ORM – Prisma ORM (Object-Relational Mapping) is a modern database toolkit that provides a high-level abstraction layer between application code and the underlying database. It simplifies database operations by allowing developers to interact with the database using a more intuitive and type-safe interface.

Frontend – Frontend refers to the client-side portion of a web application or software that is responsible for rendering the user interface and handling user interactions. It encompasses all the visual elements, layout, and behavior that users directly interact with.

Backend – Backend refers to the server-side portion of a web application or software that handles the core logic, data storage, and communication with the frontend. It includes the server, database, and application code that processes requests, performs business logic, and manages data.

Chapter II

REVIEW OF RELATED LETIRATURES

Related Literatures

The rapid expansion of the location-based services (LBS) market has been driven by the increasing adoption of smartphones, integration with e-commerce platforms, and advancements in technologies such as IoT and 5G. Reports indicate that the global LBS market is projected to grow from \$86.02 billion in 2023 to \$275.4 billion by 2028, with applications spanning navigation, transportation, retail, and urban planning (ResearchAndMarkets, 2024). These services leverage geospatial data to optimize decision-making processes for businesses, enabling them to respond swiftly to dynamic market conditions (BusinessWire, 2020). Furthermore, LBS platforms provide tailored solutions by combining GPS technology with user-specific data, enhancing convenience and efficiency in daily activities such as navigation and service discovery (Thulin & Rashid, 2019).

The literature also highlights the role of user experience in the success of LBS applications. Studies emphasize that user satisfaction stems not only from technological capabilities but also from the perceived value of location-based information in specific contexts (Pura, 2005; cited in Thulin & Rashid, 2019). The integration of real-time data with personalized recommendations has been shown to create significant value for users while fostering trust through transparency and reliability (Sunil & Mahalakshmi, 2023). Additionally, the emergence of smart cities and urban planning initiatives has further underscored the importance of LBS in improving public safety, transportation systems, and emergency response mechanisms (ResearchAndMarkets, 2024).

Related Studies

Recent studies have explored the implementation of LBS platforms to connect clients with skilled service providers. For instance, Sunil and Mahalakshmi (2023) developed an online platform that simplifies locating local service providers by utilizing geographic information systems and database integration. Their findings revealed that such platforms enhance user experience by providing easy access to services while fostering trust through reviews and ratings. Similarly, a study on real-time location systems (RTLS) demonstrated how businesses utilize spatial data analytics to

optimize operations and improve customer satisfaction (BusinessWire, 2020). These platforms enable seamless interaction between clients and service providers by integrating advanced technologies such as cloud computing and IoT.

Another significant study focused on the role of proximity marketing and beacon technology in enhancing service visibility and customer engagement. By delivering targeted advertisements based on users' locations, businesses can effectively bridge the gap between online and offline interactions (ResearchAndMarkets, 2024). Furthermore, research on mobile indoor navigation highlighted its potential to improve accessibility for individuals seeking specific services within complex environments like malls or hospitals (Thulin & Rashid, 2019). These findings collectively demonstrate the transformative impact of LBS platforms in various sectors.

Together, both literature and studies underscore the growing relevance of LBS platforms in connecting clients with skilled service providers. The integration of real-time data analytics, personalized recommendations, and advanced technologies not only enhances user experience but also fosters a mutually beneficial ecosystem for clients and providers alike.

Research Framework

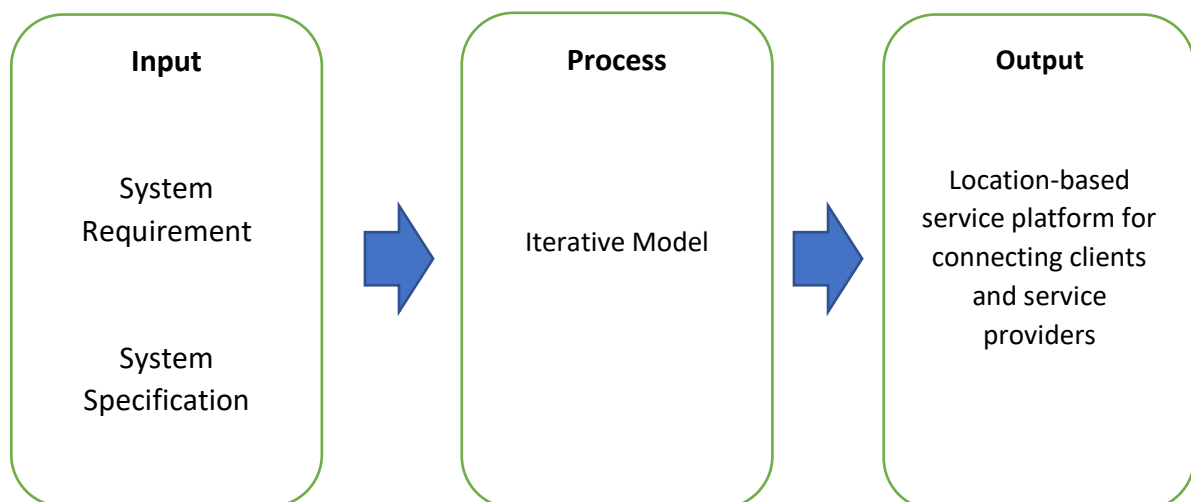


Figure 1 Research flow

The researchers adopted the Input Process Output (IPO) model from the study of (Alapján -, 2016) to show the flow of the research. As shown in figure 1, this conceptual framework illustrates the flow of data and processes within the service provider matching system. The system takes various inputs from users and providers, processes them through different modules, and produces meaningful outputs that facilitate service matching and delivery.

METHODOLOGY

This chapter outlines the strategies and methods employed to design, develop, and evaluate the proposed LOCATION-BASED SERVICE PLATFORM FOR CONNECTING CLIENTS WITH SKILLED SERVICE PROVIDERS. The methodology focuses on system development, user testing, and data analysis to ensure the platform meets its objectives.

Research Design

The study employed the developmental research approach in creating the Location-Based Service Platform for Connecting Clients with Skilled Service Providers. This approach focused on iterative development to ensure that the final product addressed user needs and expectations.

Software Model

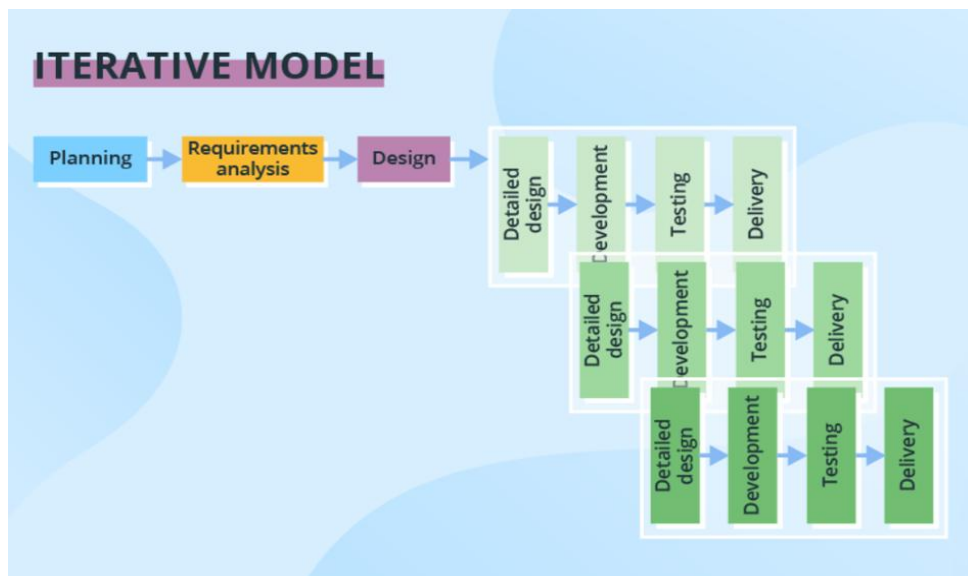


Figure 2. The Iterative Model System (Source: Google)

The development of the study used the iterative model system. An iterative model system is a type of software development life cycle model that focuses on an initial basic implementation that gradually adds more features until the final system is complete. The iterative model consists of simple steps as shown in Figure 2. The basic idea of this method is to develop a system through repeated cycles and in smaller portions at a time.

Requirement Gathering & Analysis: In this phase, all software requirements from clients and stakeholders are collected and analyzed to assess feasibility. The goal is to determine if the requirements can be met while ensuring the project stays within budget.

Design: The software design is created based on the analyzed requirements. Various diagrams such as Data Flow Diagrams (DFD), Class Diagrams, Activity Diagrams, and State Transition Diagrams are used to outline the system's architecture and functionality.

Implementation: The design is translated into code using appropriate programming languages. This phase, also known as the coding phase, focuses on building the software according to the defined design.

Testing: After coding is completed, the software is tested to identify and resolve bugs and errors. Various testing methods such as performance testing, security testing, requirement testing, and stress testing are conducted to ensure quality and reliability.

Deployment: Once the software passes testing, it is deployed to the production environment. Users begin using the software within their work environment.

Review: After deployment, the software is monitored for performance and user feedback. If issues or new requirements arise, the development cycle is repeated to create an updated version.

Maintenance: Ongoing maintenance involves resolving issues, fixing errors, and updating the software based on customer feedback and changing requirements.

Locale of the Study

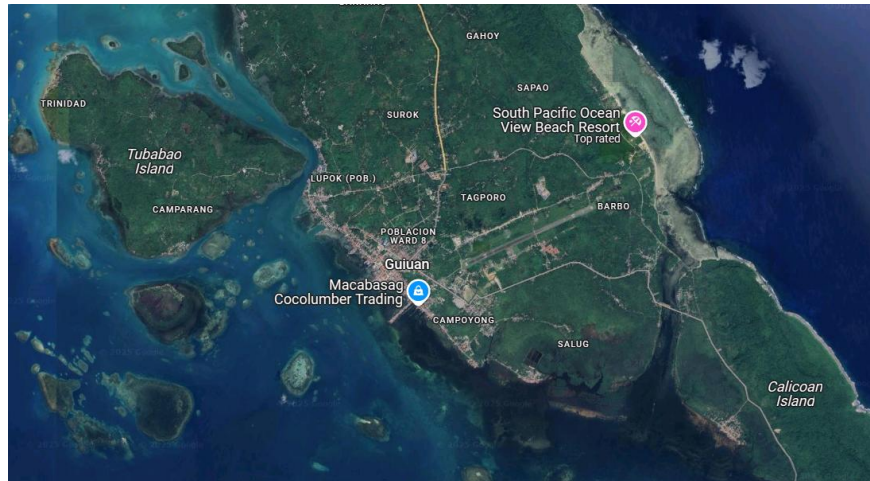


Figure 3. Guiuan Eastern Samar (Source: Google Map)

The study was conducted at Guiuan Eastern Samar.

Respondents of the Study

Table 1. Respondents of the Study

Respondents	Testing	No. of Respondents
Researcher	Benchmark	3
IT Expert	Pilot	30
Service Providers in Guiuan	Final	30
Total		63

The respondents included 3 researchers, 30 IT experts, and 30 skilled providers from different barangays in Guiuan, Eastern Samar. Three to four service providers from each barangay were randomly selected to test the system.

Research Instrument

This study employed a survey questionnaire as its research instrument. The questionnaire, which was adapted from ISO 25010, was used to collect data from the respondents. The results of the survey were utilized to evaluate the system developed by the researchers.

Table 2. Range of Instrument

SCALE	RANGE	DESCRIPTION	INTERPRETATION
5	4.21 – 5.00	Excellent	Highly Acceptable
4	3.41 – 4.20	Very Good	Acceptable
3	2.61 – 3.40	Good	Moderately Acceptable
2	1.81 – 2.60	Fair	Less Acceptable
1	1.00 – 1.80	Poor	Not Acceptable

Data Gathering Procedure

The researchers first sought permission from the campus administrator of Eastern Samar State University, Guiuan Campus, before distributing the survey questionnaire. After approval, the researchers personally administered the questionnaires to the respondents to collect the data immediately. The collected data were tabulated and analyzed.

Analysis of Data

The data gathered from the survey were compiled, organized, and analyzed using statistical methods such as mean, frequency, and percentage.

Developmental Cost

Table 3. Developmental Cost

Software/Hardware	Recommended Specification	Cost
Hardware	Asus X1400E Laptop	Free
Software	VS code editor	Free
	Mongo db	free

This table 3 outlines the hardware and software used in creating the Location-Based Service Platform for Skilled Workers.

Chapter IV

RESULTS AND DISCUSSIONS

This section provides an analysis, interpretation, and assessment of the system to illustrate its functionality.

Design and Functionality of the System

The following figures show the design and layout of the system.

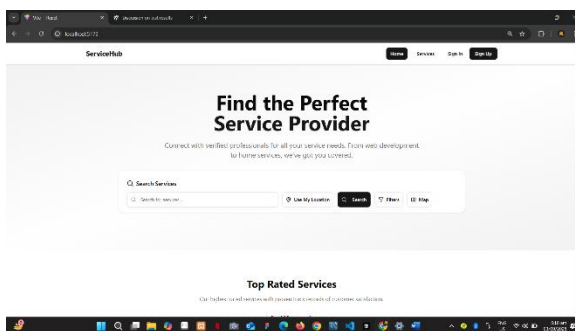


Figure 4. Home page

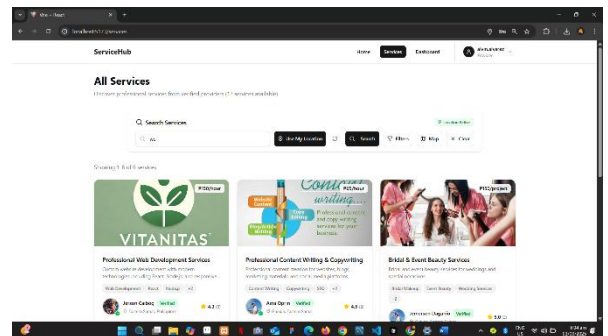


Figure 5. Service page

When visiting our site you will see our Home page as shown in figure 4. You can also browse services in the Service page shown in figure 5.

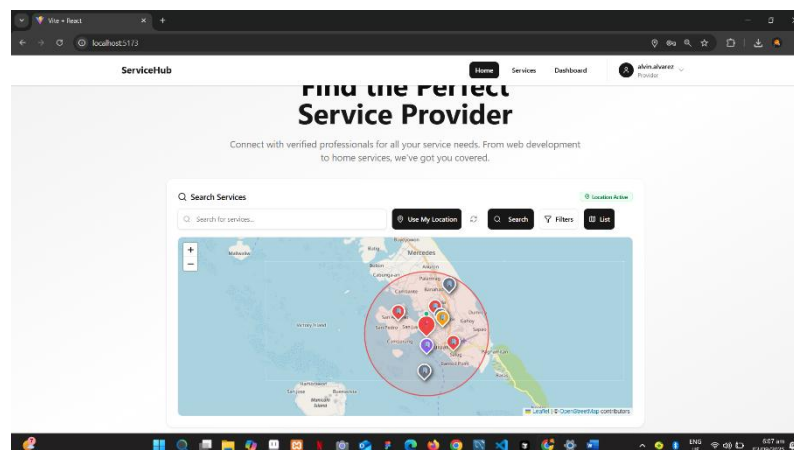


Figure 6. map feature

You can access the map feature by clicking the 'Use My Location' button and clicking 'Map' to show the location of nearby services shown in figure 6.



Figure 7. Service Details page

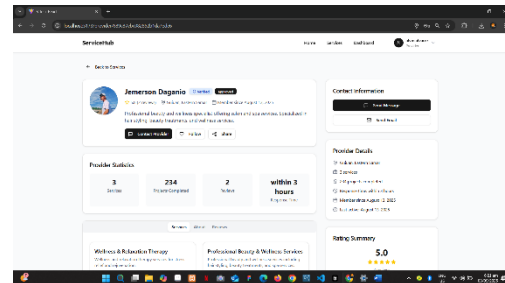


Figure 8. Provider Profile page

From service page, users can view service details as in figure 7, and view the provider profile shown in figure 8.

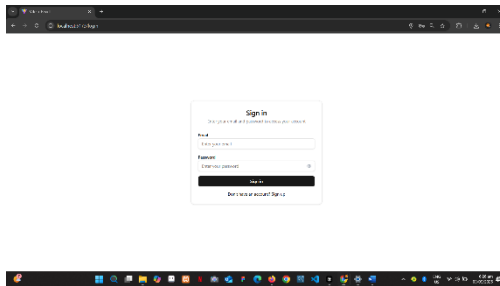


Figure 9. Login page

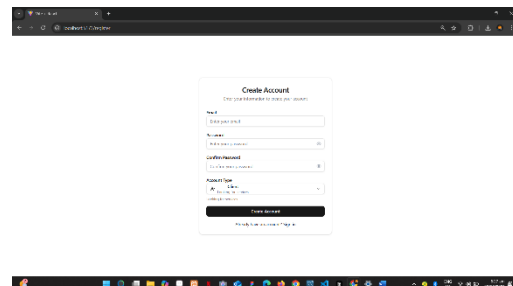


Figure 10. Signup page

Before you can access the chat provider feature you will need to login in the login page shown in figure 9, or signup for a new account in the signup page shown in figure 10.

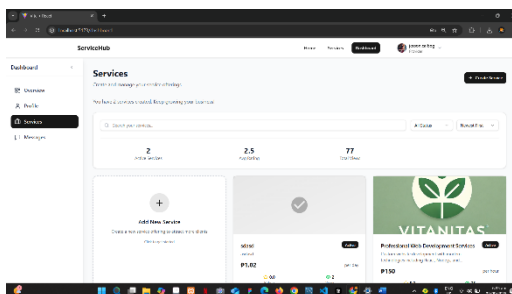


Figure 11. Provider Service dashboard

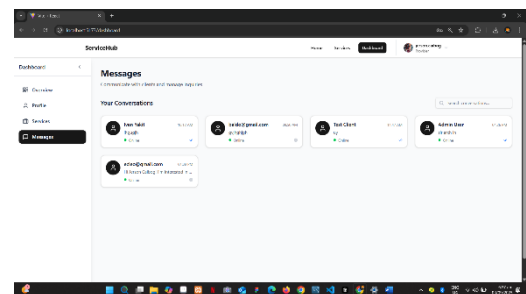


Figure 12. Messages Provider Dashboard

Service providers have access to a dashboard to monitor, manage services shown in figure 11, profiles, and messages shown in figure 12

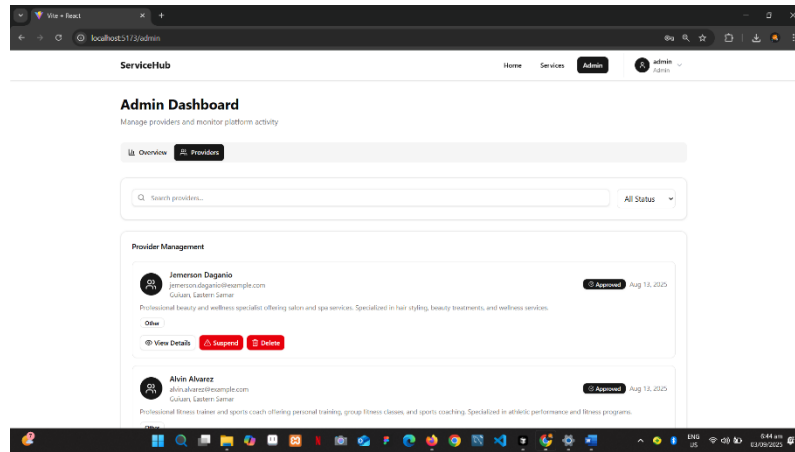


Figure 13. admin dashboard

Admins can access their own dashboard for managing service providers enabling them to approve and suspend any service providers, shown in figure13

Benchmark Test

Table 4. Distribution of the responses of the researchers on Benchmark Test.

Criteria	Mean	Interpretation
Functionality		
1. The location mapping feature works accurately.	5.0	Highly Acceptable
2. Service providers can easily view and respond to client requests.	5.0	Highly Acceptable
3. The system allows service providers to successfully post services.	5.0	Highly Acceptable
USER EXPERIENCE		Highly Acceptable
1. The user interface is intuitive and easy to navigate.	5.0	Highly Acceptable
2. Registering and logging into the platform is simple.	5.0	Highly Acceptable
3. Information is well-organized and easy to find.	5.0	Highly Acceptable
SECURITY		Highly Acceptable
1. User data is stored securely within the platform.	5.0	Highly Acceptable
2. The system prevents unauthorized access to user profiles.	5.0	Highly Acceptable
3. The login and authentication processes are secure.	5.0	Highly Acceptable
SCALABILITY		Highly Acceptable
1. The platform is designed to support future feature enhancements.	5.0	Highly Acceptable
2. The system structure allows for expansion to different geographic areas.	5.0	Highly Acceptable
3. The platform can handle increased user data without slowing down.	5.0	Highly Acceptable
Total	5.0	Highly Acceptable

Table 4 shows all items under the four major criteria—functionality, user friendly, security, and scalability—obtained a **mean of 5.00**, interpreted as **Highly Acceptable**. This means that the respondents unanimously agreed that the platform performed very well in all aspects being evaluated.

Table 5. Distribution of the Respondents for the Benchmark Test

Category	Frequency	Percentage
Excellent	3	100%
Very Good	0	0%
Good	0	0%
Fair	0	0%
Poor	0	0%
Overall Mean	5.0	100%

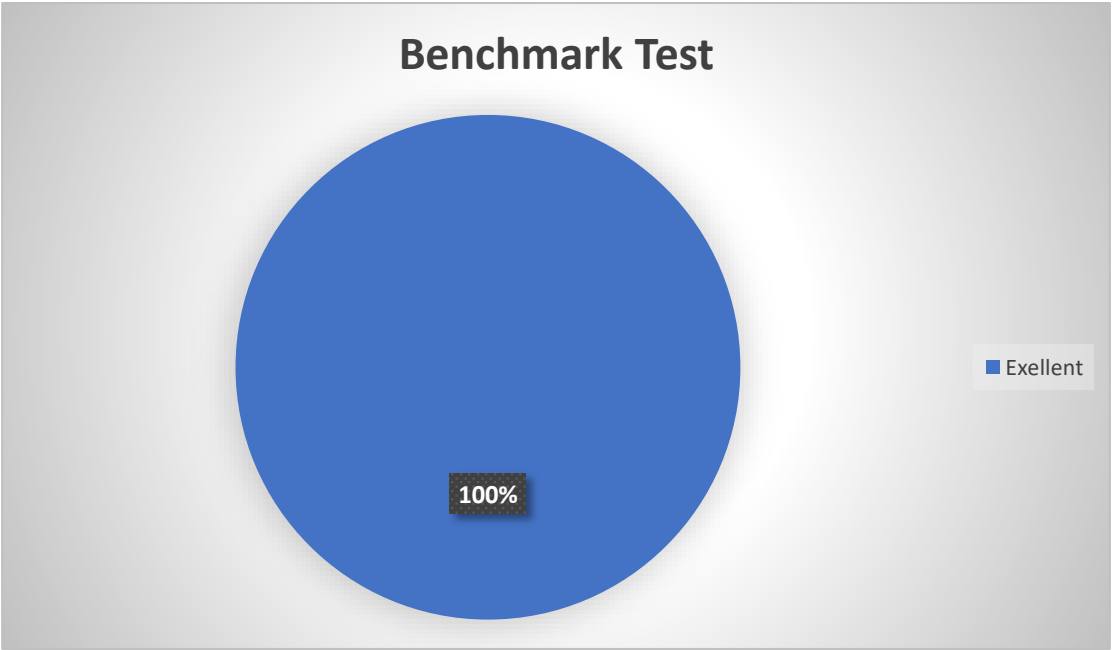


Figure 14. Pie Chart for Benchmark Test

Table 5 shows the summary evaluation of the benchmark test, where all three respondents unanimously rated the system as **Excellent (100%)**. No responses were recorded under Very Good, Good, Fair, or Poor. This indicates that the system fully satisfied the expectations of the evaluators during the initial testing phase. The unanimous Excellent rating affirms that the system is highly acceptable and effective in terms of functionality, user experience, security, and scalability.

Pilot Test

Table 6. Distribution of the responses of the researchers on Pilot Test.

Criteria	Mean	Interpretation
Functionality		
1. The location mapping feature works accurately.	4.7	Highly Acceptable
2. Service providers can easily view and respond to client requests.	4.5	Highly Acceptable
3. The system allows service providers to successfully post services.	4.6	Highly Acceptable
USER EXPERIENCE		
1. The user interface is intuitive and easy to navigate.	4.6	Highly Acceptable
2. Registering and logging into the platform is simple.	4.5	Highly Acceptable
3. Information is well-organized and easy to find.	4.5	Highly Acceptable
SECURITY		
1. User data is stored securely within the platform.	4.5	Highly Acceptable
2. The system prevents unauthorized access to user profiles.	4.6	Highly Acceptable
3. The login and authentication processes are secure.	4.4	Highly Acceptable
SCALABILITY		
1. The platform is designed to support future feature enhancements.	4.6	Highly Acceptable
2. The system structure allows for expansion to different geographic areas.	4.7	Highly Acceptable
3. The platform can handle increased user data without slowing down.	4.6	Highly Acceptable
Total	4.6	Highly Acceptable

Table 6 presents the results of the pilot test, where all evaluation criteria functionality, user experience, security, and scalability were rated as Highly Acceptable, with a total mean of 4.6. The scores ranged from 4.4 to 4.7, indicating that most respondents rated the system as Excellent, while some provided slightly lower ratings of Very Good. These results suggest that the system is generally effective, functional, and user-friendly, though minor issues such as internet speed and accessibility slightly affected its reliability. Overall, the findings confirm that the platform successfully met its intended purpose and was highly acceptable to the respondents during the pilot testing phase

Table 7. *Summary Evaluation of Pilot Test*

Category	Frequency	Percentage
Excellent	219	60.8%
Very Good	123	34.2%
Good	16	4.4%
Fair	2	0.6%
Poor	0	0%
Total	360	100%

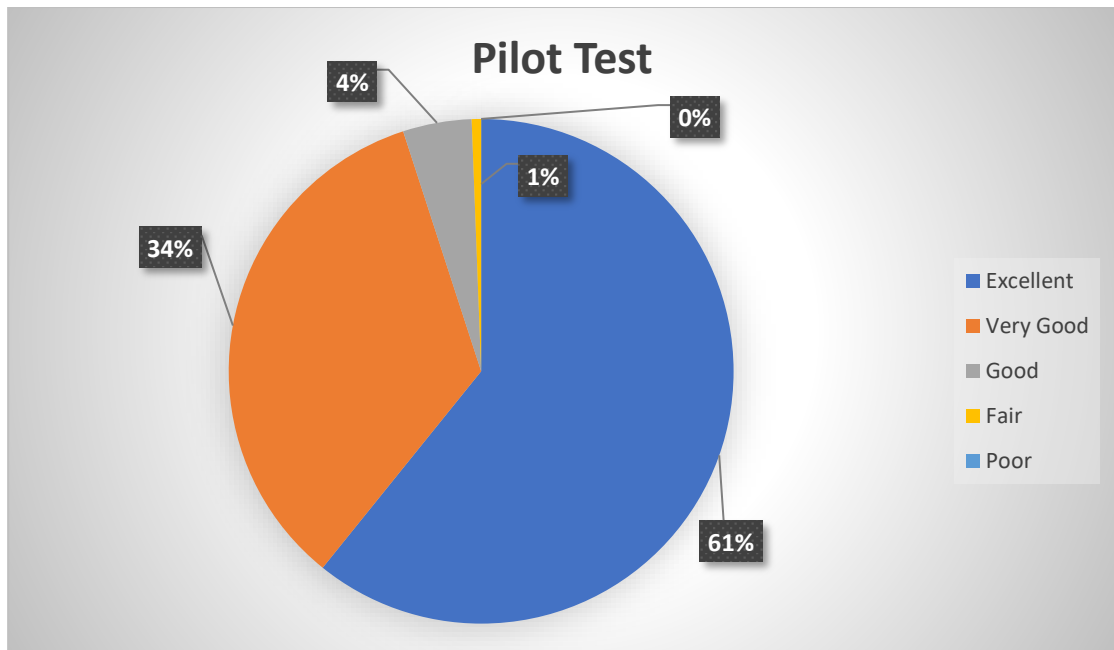


Figure 15. Pie Chart for Pilot Test

The pie chart presents the overall distribution of responses from the pilot testing of the system. As shown, most respondents provided a rating of **5 (Excellent)**, followed by **4 (Very Good)**, while only a minimal percentage rated the system as **2 (Fair)**. Notably, no responses were recorded under the lower categories of 1 (Poor). This distribution indicates that the respondents generally perceived the system as highly effective and acceptable across all evaluation criteria.

Final Test

Table 8. Distribution of the responses of the researchers on Final Test.

Criteria	Mean	Interpretation
Functionality		
1. The location mapping feature works accurately.	4.9	Highly Acceptable
2. Service providers can easily view and respond to client requests.	4.6	Highly Acceptable
3. The system allows service providers to successfully post services.	4.8	Highly Acceptable
USER EXPERIENCE		
1. The user interface is intuitive and easy to navigate.	4.7	Highly Acceptable
2. Registering and logging into the platform is simple.	4.8	Highly Acceptable
3. Information is well-organized and easy to find.	4.6	Highly Acceptable
SECURITY		
1. User data is stored securely within the platform.	4.6	Highly Acceptable

2. The system prevents unauthorized access to user profiles.	4.5	Highly Acceptable
3. The login and authentication processes are secure.	4.7	Highly Acceptable
SCALABILITY		
1. The platform is designed to support future feature enhancements.	4.7	Highly Acceptable
2. The system structure allows for expansion to different geographic areas.	4.8	Highly Acceptable
3. The platform can handle increased user data without slowing down.	4.7	Highly Acceptable
Total	4.6	Highly Acceptable

Table 8 presents the results of the pilot test, where all evaluation criteria functionality, user experience, security and scalability were rated as Highly Acceptable, with a total mean of 4.6. The scores ranged from 4.5 to 4.9, indicating that most respondents rated the system as Excellent, while some provided slightly lower ratings of Very Good. These results suggest that the system is generally effective, functional, and user-friendly, though minor issues such as internet speed and accessibility slightly affected its reliability. Overall, the findings confirm that the platform successfully met its intended purpose and was highly acceptable to the respondents during the pilot testing phase.

Table 9. Summary Evaluation of Final Test

Category	Frequency	Percentage
Excellent	255	70.8%
Very Good	105	29.2%
Good	0	0%
Fair	0	0%
Poor	0	0%
Total	360	100%

The table 9 above shows the overall frequency result of the Final Test. The result shows that it has the highest frequency count was Highly Acceptable with a percentage value of 70.8%.

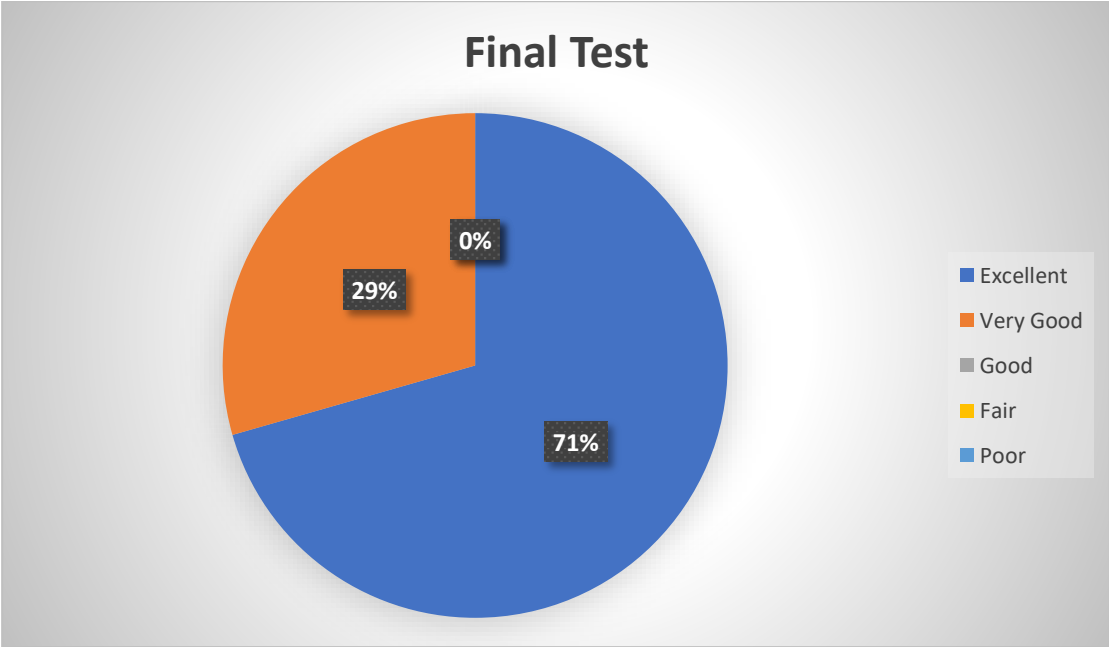


Figure 16. Pie Chart for Pilot Test

The pie chart presents the overall distribution of responses from the pilot testing of the system. As shown, most respondents provided a rating of **5 (Excellent)**, followed by **4 (Very Good)**, while only a minimal percentage rated the system as **3 (Good)**. Notably, no responses were recorded under the lower categories of 2 (Fair) and 1 (Poor). This distribution indicates that the respondents generally perceived the system as highly effective and acceptable across all evaluation criteria.

Table 10. Percentage Distribution of the Responses of all Respondents

SCALE	BENCHMARK TEST	PILOT TEST	FINAL TEST
Highly Acceptable	100%	60.8%	70.8%
Acceptable	0%	34.2%	29.2%
Moderately Acceptable	0%	4.4%	0%
Less Acceptable	0%	0.6%	0%
Not Acceptable	0%	0%	0%
TOTAL	100%	100%	100%

The results of the evaluation show a clear shift in the level of acceptability across the three phases. In the **benchmark test**, all responses (100%) were rated as *highly acceptable*, indicating strong initial approval. However, during the **pilot test**, the level of *highly acceptable* dropped to 60.8%, while *acceptable* ratings increased to 34.2%, suggesting that respondents identified areas needing improvement when the intervention was first implemented. By the **final test**, the percentage of *highly acceptable* ratings improved to 70.8%, while *acceptable* ratings slightly decreased to 29.2%. This indicates that revisions and adjustments made after the pilot phase had a positive impact, leading to higher overall acceptance. Notably, no ratings of *less acceptable* or *not acceptable* were observed in the final test, showing that the intervention maintained a generally positive reception throughout.

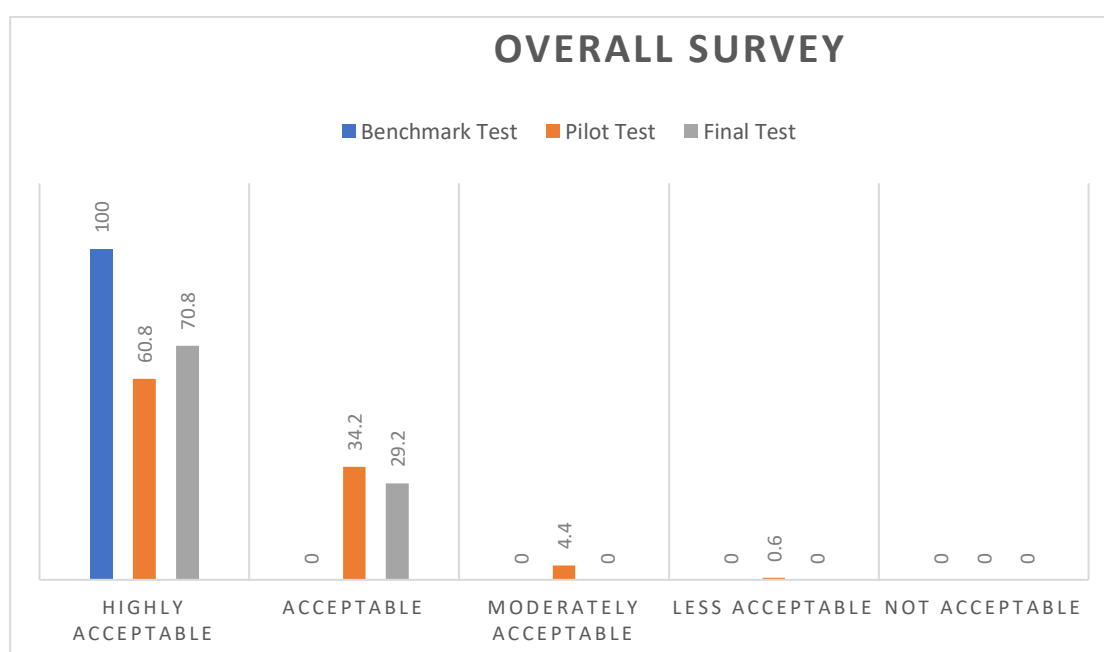


Figure 17. Overall Percentages on the Distribution of the Respondents.

Figure 17 illustrates the survey results given by respondents of the study. The bar graph analyzes the total comparison result of all the survey result; this is to identify if the survey gathering of Location-Service Platform for Skilled Service Providers had been considered Highly Acceptable to the respondents.

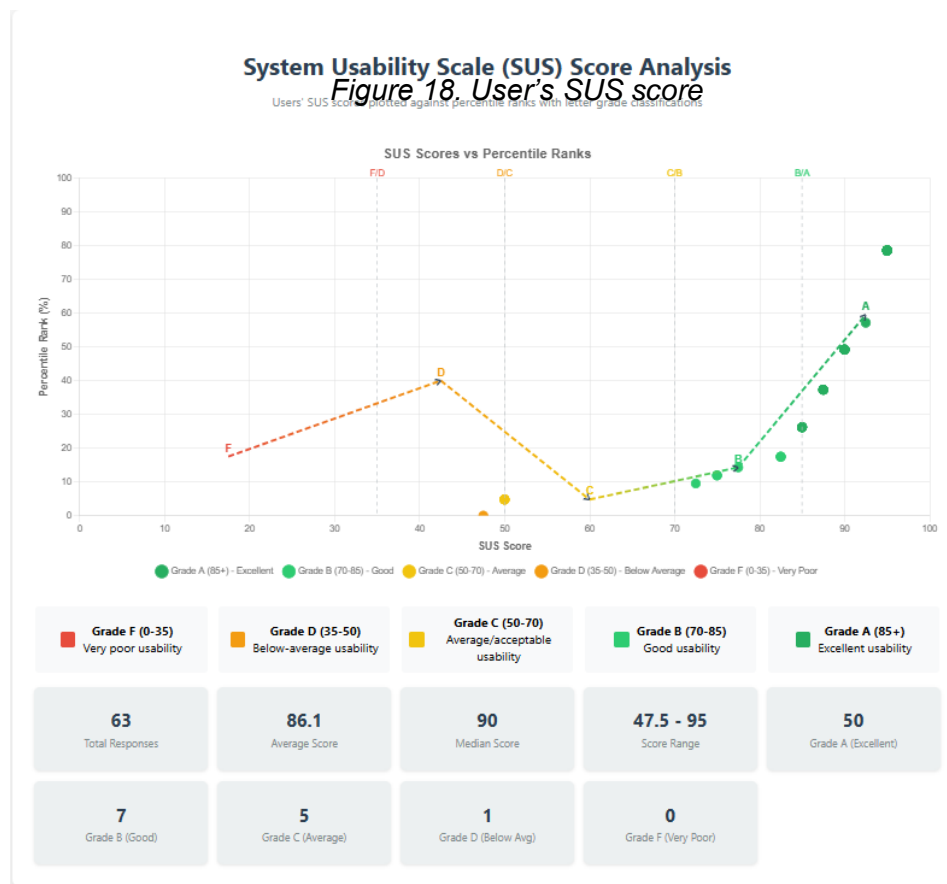


Figure 18 illustrates the distribution of System Usability Scale (SUS) scores in relation to their percentile rankings, offering insights into user perceptions of system usability. The horizontal axis displays SUS scores from 0 to 100, while the vertical axis indicates percentile rankings that demonstrate how individual scores compare within the overall dataset.

The visualization incorporates a letter-grade classification system (A through F) to categorize usability levels: Grades of F (below 35) indicate severely compromised usability; D grades (35-50) reflect substandard usability performance; C grades (50-70) denote acceptable usability standards; B grades (70-85) demonstrate strong usability with positive user satisfaction; and A grades (above 85) represent exceptional usability with highly satisfied users.

Chapter V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

In this chapter, you will find the summary of findings, conclusions, and recommendations.

Summary

The Location-Based Service Platform was developed to enhance service accessibility by efficiently connecting clients with skilled service providers in their local area. By integrating geolocation technology and real-time messaging capabilities, we enhanced the platform's reliability for location-based service discovery and by developing an intuitive web application, we make the system user-friendly to both service seekers and providers. Our testing involved three main groups: researchers for the Benchmark test, IT professionals for the Pilot test, and local service providers for the Final test. Based on the Benchmark test, the platform received a rating of "Highly Acceptable" with an average score of 5.0. During the Pilot test, it maintained a "Highly Acceptable" rating with an average score of 4.6 from IT professionals. Lastly, the Final test with local service providers also showed a "Highly Acceptable" rating, with an average score of 4.5.

Conclusion

This study proved that a Location-Based Service Platform for Skilled Service Providers can help local service providers to connect and share their service locations with clients seeking professional assistance, hence improving service accessibility and reducing search time for quality providers. The overall rating of the survey result from the Benchmark Test with a mean of 5.0 is evaluated as Highly Acceptable, and the Pilot Test with a mean of 4.6 is evaluated as Highly Acceptable. For the Final Test, the mean was also 4.5 and evaluated as Highly Acceptable. To sum it all the Overall Mean

is 4.7 which is evaluated as Highly Acceptable. This means that most of the respondents answered 5 as the highest scale on the survey questionnaire and 4 as the second highest number on the scale, which means that it was the expected data that the researchers aimed to acquire.

Recommendations

1. The app should include a booking feature.
2. It is recommended that the system include a feature allowing providers and client to process payments.
3. To enhance interoperability, it is suggested that an app be created to support multiple mobile operating systems, including iOS and others.

Chapter VI

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Survey Questionnaire
Adapted from ISO 25010 (Software Evaluation Criteria)
Hand Gesture Based Presentation Controller

Name of Respondent (Optional): _____ Date: _____

Direction: Evaluate the system based on the given specifications, using the legend scale indicated below.

Legend: 5 – Excellent 4 – Very Good 3 – Good 2 – Fair 1 – Poor

FUNCTIONALITY	5	4	3	2	1
1. The location mapping feature works accurately.					
2. Service providers can easily view and respond to client requests.					
3. The system allows service providers to successfully post services.					
USER EXPERIENCE	5	4	3	2	1
1. The user interface is intuitive and easy to navigate.					
2. Registering and logging into the platform is simple.					
3. Information is well-organized and easy to find.					
SECURITY	5	4	3	2	1
1. User data is stored securely within the platform.					
2. The system prevents unauthorized access to user profiles.					
3. The login and authentication processes are secure.					
SCALABILITY	5	4	3	2	1
1. The platform is designed to support future feature enhancements.					
2. The system structure allows for expansion to different geographic areas.					
3. The platform can handle increased user data without slowing down.					

Respondent Signature: _____

